	Application No.	Applicant(s)
Notice of Allowability	09/155,452 Examiner	BORTS ET AL. Art Unit
	Joseph T. Woitach	1632
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT F of the Office or upon petition by the applicant. See 37 CFR 1.31	S (OR REMAINS) CLOSED in to i) or other appropriate commun RIGHTS. This application is sul	his application. If not included ication will be mailed in due course. THIS
1. \boxtimes This communication is responsive to <u>2/27/2006</u> .		
2. The allowed claim(s) is/are 55 and 57-60.		
 3. ☐ Acknowledgment is made of a claim for foreign priority u a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents hav 		(f) .
Certified copies of the priority documents have Certified copies of the priority documents have		No
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International Bureau (PCT Rule 17.2(a)).	bodinents have been received i	in this national stage application from the
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be subminiformal patent APPLICATION (PTO-152) which give	MENT of this application. nitted. Note the attached EXAN	IINER'S AMENDMENT or NOTICE OF
5. CORRECTED DRAWINGS (as "replacement sheets") mu		ecialation is deficient.
(a) ☐ including changes required by the Notice of Draftsper		PTO-948) attached
1) hereto or 2) to Paper No./Mail Date	· · · · · · · · · · · · · · · · · · ·	1 10-540) attached
(b) ☐ including changes required by the attached Examiner Paper No./Mail Date		n the Office action of
Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in		
 DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT 		
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)		rmal Patent Application (PTO-152)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Sun Paper No./M	nmary (PTO-413), ail Date
3. Information Disclosure Statements (PTO-1449 or PTO/SB/	08), 7. ⊠ Examiner's A	mendment/Comment
Paper No./Mail Date 4.	8. 🛛 Examiner's S	tatement of Reasons for Allowance
of Biological Material	9.	
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Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 27, 2006 has been entered.

DETAILED ACTION

This application is a 371 National stage filing of PCT/GB97/00875, filed March 27, 1997, which claims benefit to provisional application 60/014,490, filed April 1, 1996.

Applicants amendment filed February 27, 2006, has been received and entered. Claims 1-54, 56 and 61-63 have been canceled. Claims 55, 57-60 are pending.

Election/Restriction

Claims 55, 57-60 are pending.

The claims have been amended from methods and processes practiced in the species of animals to methods encompassing the non-elected species of <u>yeast</u>.

Applicant was required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Upon the allowance of a generic claim, applicant would be entitled to

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consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141.

No generic claim was found allowable, and in this case, Applicants have cancelled all the claims to the elected species, so a generic claim exists no longer exists.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is withdrawn.

Cancellation of the claims has rendered the rejection moot.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 55, 57-60 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention is withdrawn.

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The amendments to the claims have obviated the basis of the rejection, as it more clearly sets forth step (d) in claim 55 as supported by the instant specification, and provides for use of the hybrid yeast cell in further method steps.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 55, 57-60 rejected under 35 U.S.C. 102(b) as being anticipated by Selva *et al*. (IDS reference, March 1995) <u>is withdrawn</u>.

As indicated by Applicants (see page 6 of Applicants amendment), the claimed methods are distinguished from those of Selva et al. teach that. Selva et al. teach a system used allowed for recombination that would result in a predictable outcome depending on the specific gene conversion that occurred. Though Selva et al. teach the use of non-homologous sequences (Figure 1) and report the affect of various alterations (i.e. altering mutL and mutS result in an increase in homologous recombination of divergent sequences) in recombination of the various strains (Tables 2 and 3), they only teach methods where **mitosis** is affected.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

The present claims have been differentiated from the art of record. At the time of filing genes known to affect recombination were known and studied. In particular, yeast were demonstrated to have a very stringent requirement/ability for homologous recombination that could be reduced by altering sequences that encoded enzymes involved in mismatch repair. However, while this affect was recognized and studied in yeast undergoing mitosis, it was not recognized nor utilized in yeast cells undergoing meiosis. Selva et al. fails to teach methods of affecting meiosis, and while they were well known at the time of filing, there is no motivation nor expectation to achieve the requirements set forth in the claim

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Woitach whose telephone number is (571) 272-0739.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla, can be reached at (571) 272-0735.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group analyst Dianiece Jacobs whose telephone number is (571) 272-0532.

Joseph T. Woitach

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